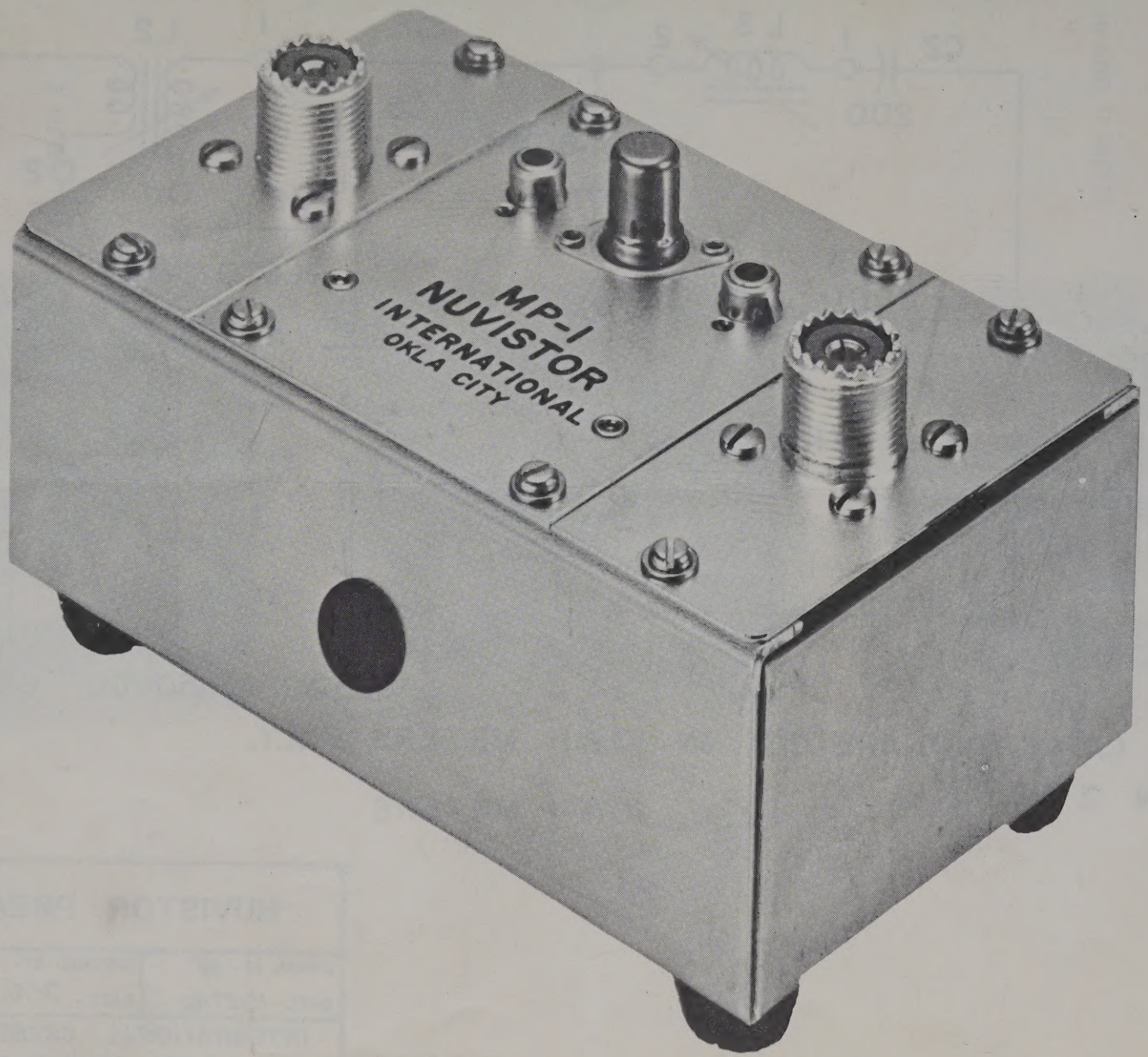
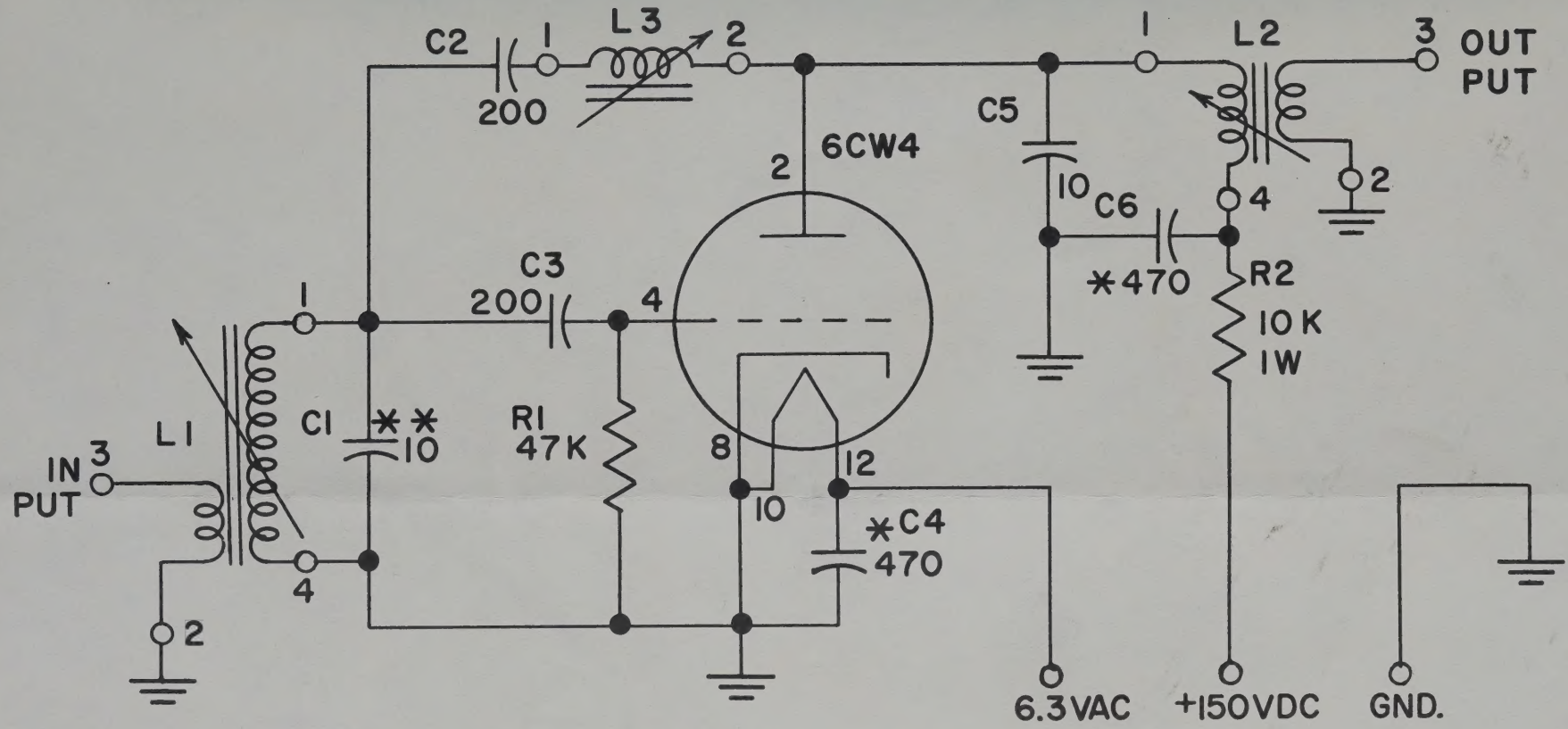

MP-1
NUVISTOR
INTERNATIONAL
OKLA CITY



* THESE CAPACITORS ARE .001 ON 10&11 METERS ONLY.

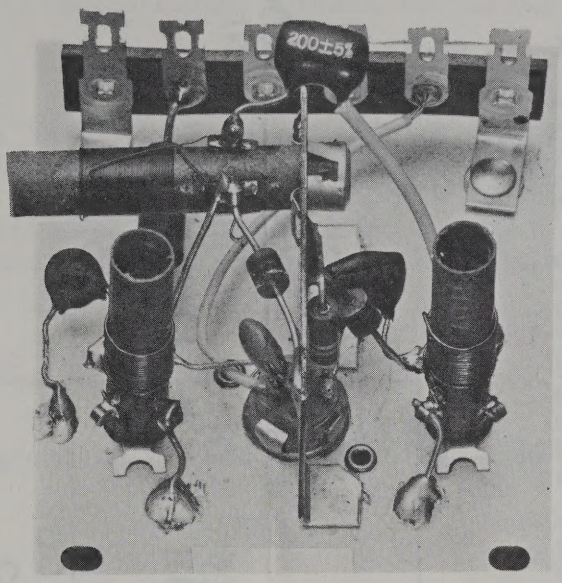
** 6.8 ON 2 METER

2, 6, 10&11 METERS

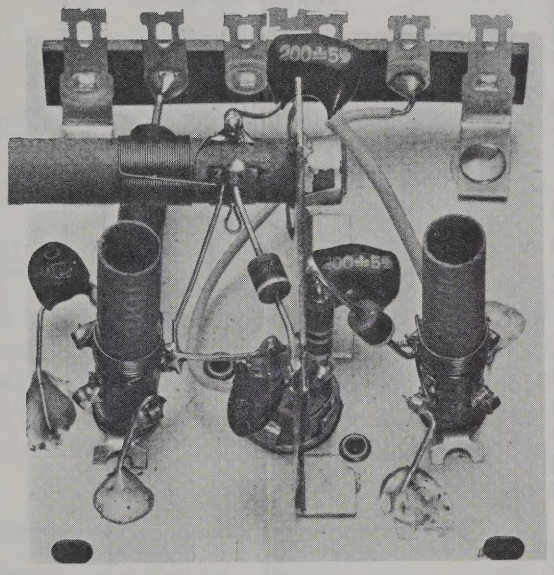
NUVISTOR PREAMPLIFIER		
DRAWN BY- *JE* DATE- *12/27/61*	CHECKED BY- DATE- *W.A.R*	APPROVED BY — —
INTERNATIONAL CRYSTAL MFG. CO., INC. 18 N. LEE, OKLAHOMA CITY, OKLAHOMA		

BOTTOM VIEWS OF ALL UNITS

10 AND 11 METER



6 METER



2 METER

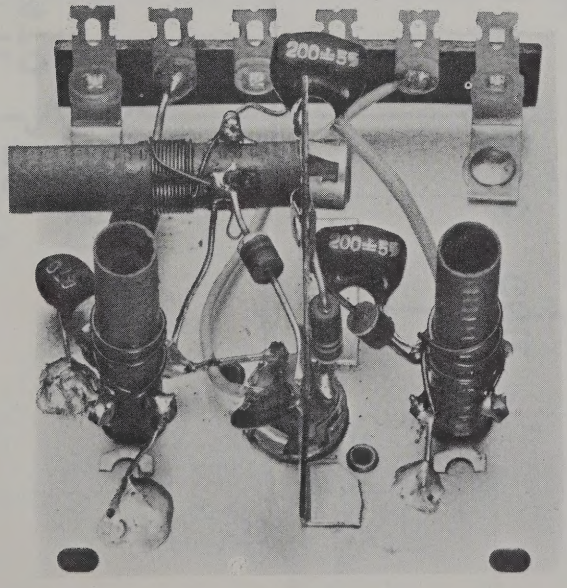
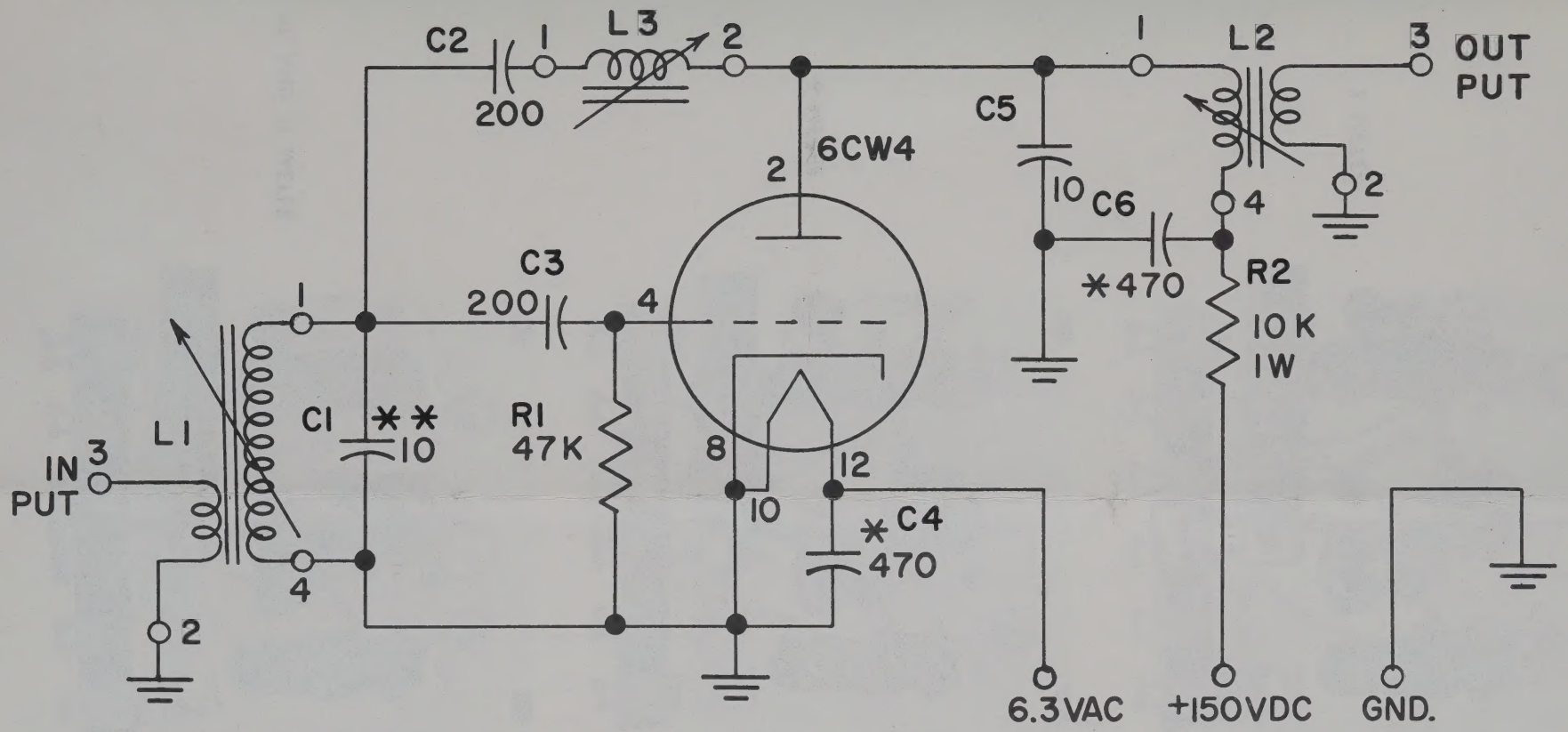


Fig. 1



* THESE CAPACITORS ARE .001 ON 10&11 METERS ONLY.

** 6.8 ON 2 METER

2, 6, 10&11 METERS

NUVISTOR PREAMPLIFIER		
DRAWN BY- *JB* DATE- *12/27/61*	CHECKED BY- DATE- *W.A.R*	APPROVED BY — —
INTERNATIONAL CRYSTAL MFG. CO., INC. 18 N. LEE, OKLAHOMA CITY, OKLAHOMA		

MP-1 PREAMPLIFIER
INSTALLATION & OPERATION MANUAL

GENERAL

The MP-1 Nuvistor Preamplifier is a compact, single stage unit using inductive neutralization. The signal is coupled to the grid through coil L1 which is resonate at the operating frequency. It is then amplified and appears across output coil L2 which is also resonate at the operating frequency. Neutralization is accomplished by coil L3.

SPECIFICATIONS

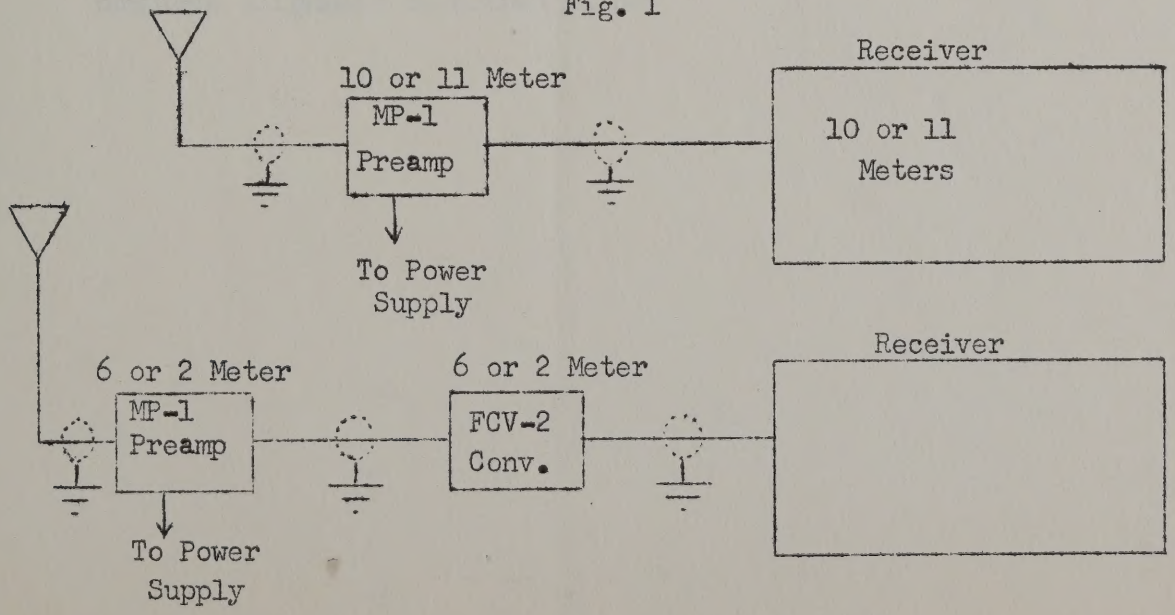
	10 & 11 Meter	6 Meter	2 Meter
Power Requirements	150 VDC 10 ma. 6.3 VAC @ 150 ma.	150 VDC @ 10 ma. 6.3 VAC @ 150 ma.	150 VDC @ 10 ma 6.3 VAC @ 150 m
Frequency	26-32 mc	40-58 mc	140-150 mc
Size	3x2½x2	3x2½x2	3x2½x2
Weight	2 oz.	2 oz.	2 oz.
Tube Type	6CW4 Nuvistor	6CW4 Nuvistor	6CW4 Nuvistor
Gain (Minimum)	20 db	15 db	10 db
Input Impedance	50-70 ohm unbalanced	50-70 ohm unbalanced	50-70 ohm unbalanced
Output Impedance	50-70 ohm unbalanced	50-70 ohm unbalanced	50-70 ohm unbalanced
6 db Bandwidth	2 Percent	2 Percent	2 Percent

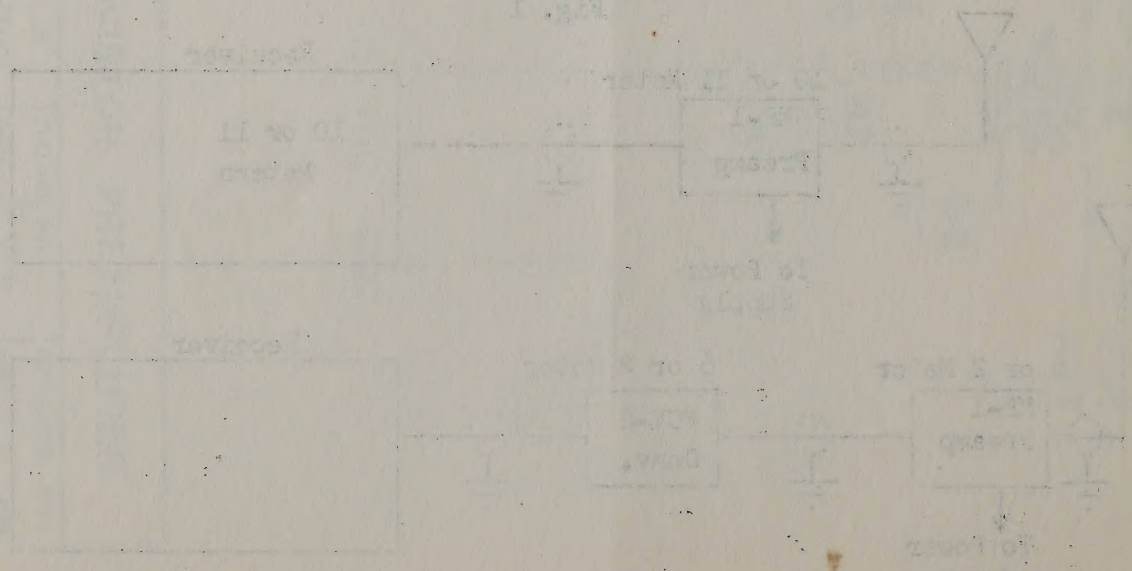
INSTALLATION & OPERATION

The Nuvistor MP-1 preamplifier is designed to mount on the MC Mounting Chassis, catalog No. 150-198 with two MC Coupling Sections, catalog No. 150-197. These units are available from International Crystal and are designed to provide a complete mounting system for the Nuvistor preamplifier. The unit may be chassis mounted in a 2 11/32 x 2½ hole.

Figure 1 is a sketch of how the Nuvistor preamplifier should be installed in your receiving system. Use RG 58/U or RG 59/U for connecting the antenna and interconnecting to the receiver or converter.

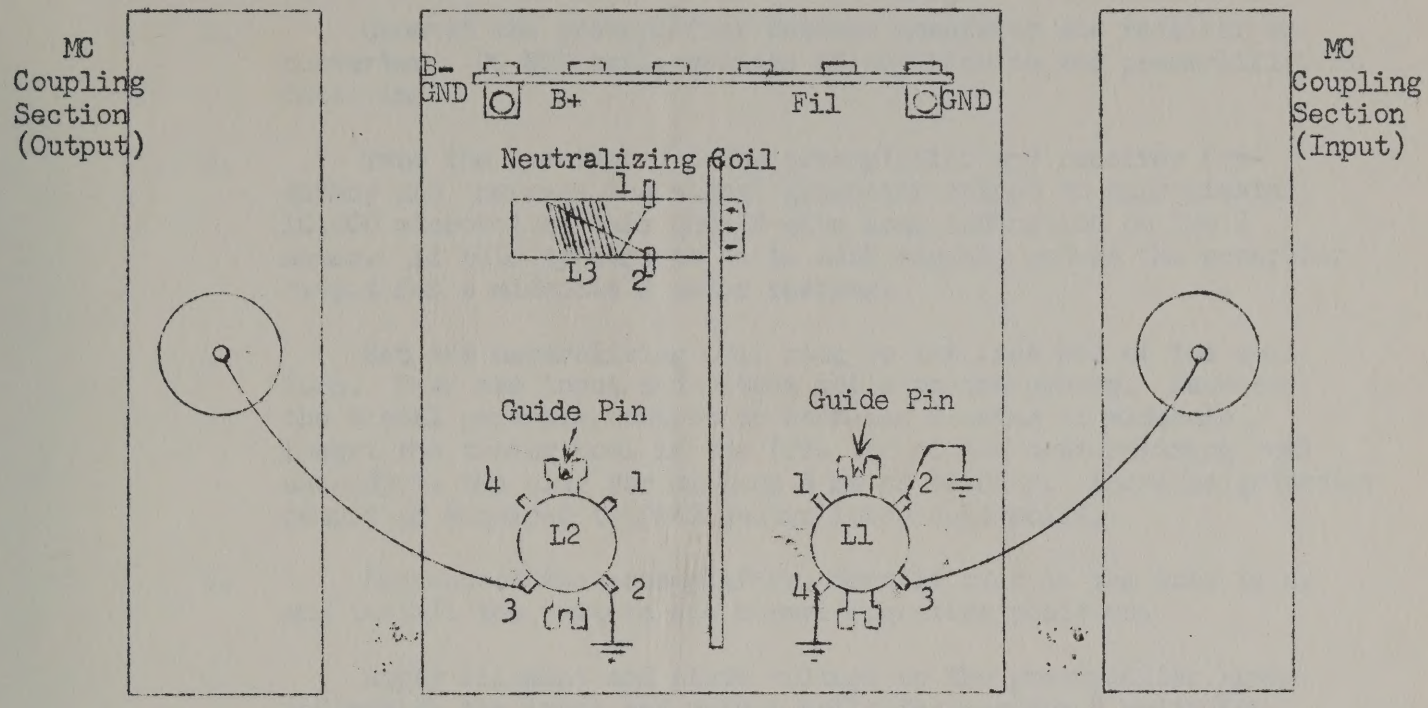
Fig. 1





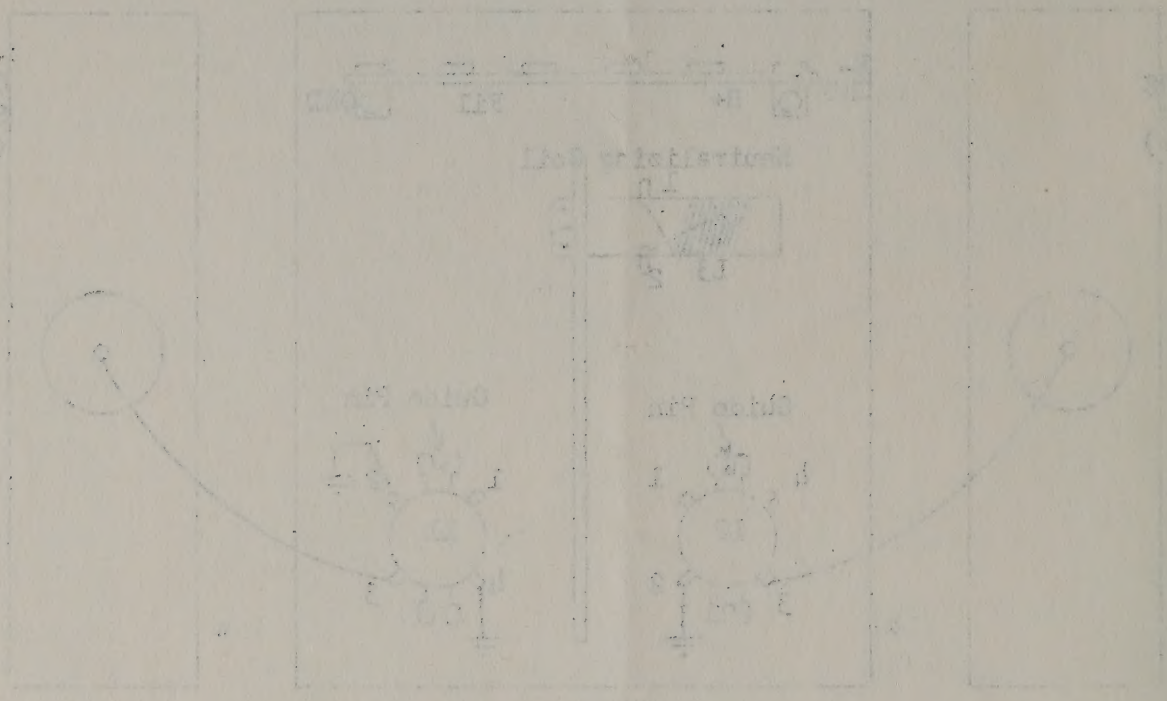
The MP-1 preamplifier has been pretuned at the factory and should only require peaking of the input and output coils after installation.

BOTTOM VIEW MP-1



Connect the power as shown in figure 2. Satisfactory operation can be obtained with plate voltages between 100 and 175 volts dc. Connect a short piece of wire between the input and output coax sockets and their respective lugs on the input and output coils.

The MP-1 preamplifiers are pretuned for use at 27 MC, 29 MC, 51 MC, or 145 MC depending on the unit purchased. The preamplifier input and output coils maybe repeaked for best operation around these frequencies. A greater bandpass with some loss in gain can be obtained by stagger tuning the input and output coils. Operation somewhat remove from the above pretuned frequencies will require complete alignment described below.



ALIGNMENT PROCEDURE

1. Mount the MP-1 Preamplifier up side down on its mounting base.

2. Connect the preamplifier between generator and receiver or converter. DO NOT apply voltage of any kind to the preamplifier at this time.

3. Tune the generator to the preamplifier and receiver frequency and increase the signal generator output to approximately 10,000 microvolts; this should give some indication on the S meter. If this appears to be to much signal, reduce the generator output for a midscale S meter reading.

4. Set the neutralizing coil slug to the free end of the coil form. Peak the input and output coils on the preamp. Decrease the signal generator output to keep the S meter at midscale. Insert the tuning tool in the free end of the neuteralizing coil and adjust the slug for minimum S meter reading. Increase generator output as required to find neutralizing null point.

5. Disconnect the preamplifier, turn it over so the tube is up and install the unit in its normal operating position.

6. Apply filament and plate voltage to the preamplifier again and repeak the input and output coils for maximum S meter indication. These coil slugs are accessable through the top of the metal chassis. If the MP-1 has been properly adjusted no instability in operation will be noted. If the unit is not properly neutralized, oscillation will occur either when power is applied or as the input and output coils are peaked. This oscillation can normally be noted by blocking of the receiver. and full S meter reading. Should oscillation occur, repeat the alignment steps.

Conditions of Sale

All International Crystal Mfg. Co. products are sold on a final sale condition only and are not subject to refund. Items may be returned only under the conditions set forth below and only with the expressed permission of International Crystal Mfg. Co.,Inc.

Shortage or error in shipment will be corrected no-charge upon written notice by the customer. This company cannot be responsible for delays encountered in the mails but will do everything possible to insure speedy delivery.

Warranty

All International Crystal Mfg. products are sold under Warranty to meet the specifications advertised. International Crystal Mfg. Co., Inc. cannot be responsible for the associated equipment with which their products are used. It must be assumed the customers responsibility for the proper installation of the units and the proper operating condition of associated equipment.

Units are subject to return only under the policy listed below. No material should be returned without first obtaining a RETURN MATERIAL TAG from this Company.

Return Material Policy
(Electronic Kits and Subassemblies)

Do not return items without obtaining a Return Material Tag from International Crystal Mfg. Co., Inc. 18 North Lee, Oklahoma City 2, Oklahoma.

All kits and wired subassemblies are manufactured to meet the advertised specifications. In all cases the customer skill and the equipment with which he uses the units will affect their performance. International Crystal can therefore not be responsible for the overall operation of a unit but only the unit itself.

When units are returned they will be tested under our standard conditions and when found to be operating properly will be returned to the customer with full details.

Units purchased wired, and found to be defective will be repaired no-charge if such unit is returned within a period of 90 days from the date of purchase, where registration card is on file (where applicable).

Units purchased in kit form may be returned for check and alignment as listed in the instructions of each kit. Any defective parts found will be replaced for a period of 90 days from the date of purchase no-charge providing the kit registration card is on file with International Crystal Mfg. Parts will be charged at cost beyond this period or when the parts have been damaged by the customer during assembly of the kit.

1650/850